

NEWLY RECOGNIZED SYNONYMS, HOMONYMS, AND
COMBINATIONS IN THE NORTH AMERICAN
MIRIDAE (HETEROPTERA)

THOMAS J. HENRY

Systematic Entomology Laboratory, IIBIII,
ARS, USDA, % U.S. National Museum of Natural History,
Washington, D.C. 20560

Abstract.—In the North American Miridae, nine new synonyms for species and one for a genus are proposed, replacement names are given for two homonyms, ten species are transferred to different genera, and six lectotypes are selected.

Recent study of the literature and type material in several museums has revealed a number of synonyms, homonyms, and incorrectly placed species. These discoveries are here presented to make them available for entry in the forthcoming catalog of the Heteroptera of the continental United States and Canada. In this paper, I propose nine new synonyms for species and one for a genus, offer replacement names for two homonyms, transfer ten species to different genera, and select six lectotypes.

The following abbreviations are used for institutions cited in this paper: BM (British Museum [Natural History]), London; CAS (California Academy of Sciences, San Francisco); CU (Cornell University, Ithaca, New York); NRS (Naturhistoriska Riksmuseet, Stockholm); PDA (Pennsylvania Department of Agriculture, Harrisburg); PU (Purdue University, West Lafayette, Indiana); USNM (United States National Museum of Natural History, Washington, D.C.); UZMH (Universitetets Zoologiska Museum, Helsinki); ZIL (Zoological Institute, Leningrad).

Criocoris saliens (Reuter)

Strongylotes saliens Reuter, 1876:88.

Criocoris canadensis Van Duzee, 1912:511 (synonymized by Blatchley, 1926:961).

Criocoris saliens Van Duzee, 1914:29.

Atractotomus flavotarsus Johnston, 1939:129; Froeschner, 1963:4. **New Synonymy.**

Criocoris saliens is a widespread phyline ranging from Ontario and Massachusetts, south to Georgia, and west to Saskatchewan, California, and Texas (Carvalho, 1958; Henry and Smith, 1979; Kelton, 1980). The known hosts of *saliens* are *Galium aparine* L. (Knight, 1941), *G. boreale* L. (Kelton, 1980), and *G. mollugo* L. (Wheeler et al., 1983).

Atractotomus flavotarsus was described from a long series of specimens taken "breeding" on *Houstonia angustifolia* Michx. at Huntsville, Texas (Johnston, 1939). Froeschner (1963) included this species in his key to the genus *Atractotomus* based on characters from the original description. There is no other record for this species in the literature.

I have compared paratypes of *flavotarsus* (USNM) to material of *saliens* from the

eastern United States and find them indistinguishable. Both *Houstonia* and *Galium* belong to the family Rubiaceae.

Dagbertus fasciatus (Reuter)

Lygus fasciatus Reuter, 1876:72.

Dagbertus fasciatus: Kelton, 1955:284; Leston, 1979:377; Carvalho and Fontes, 1983: 158.

Dagbertus fasciatus was described from South Carolina (Reuter, 1876). There has been considerable confusion over the identity of this species and the closely related *Dagbertus olivaceus* (Reuter, 1907) described from Jamaica. Knight (1917) and Blatchley (1926) suggested that *olivaceus* was a junior synonym of *fasciatus*. Kelton (1955), however, studied male parameres and concluded that both were distinct species of the genus *Dagbertus*, and later (1974) suggested that *Lygus hospitus* Distant, described from Mexico, was the senior synonym of *olivaceus* Reuter. Leston (1979) agreed that two species were involved, but disagreed with Kelton claiming that he reversed the figures of male genitalia of *fasciatus* and *olivaceus*, and placed *hospitus* as a junior synonym of *fasciatus*, not as a senior synonym of *olivaceus*.

Apparently no one has compared type material of *fasciatus* and *olivaceus* to fully clarify the above confusion. I have examined syntypes and hundreds of specimens of both species from the eastern United States and agree that Leston (1979) was correct in his interpretation of these species.

I have found that the pale second antennal segment of *fasciatus* vs. the apically black second antennal segment for *olivaceus*, first noted by Leston (1979), will consistently distinguish the two species. Additionally, on *fasciatus*, the apex of the scutellum is never reddish or infuscated, even in the darkest specimens (on extremely pale specimens there may not be any scutellar marks, but in this case, the inner margin of the clavus nearly always is infuscated or clouded with brown); whereas on *olivaceus*, the entire scutellum, or most often, the apical $\frac{1}{3}$ is reddish, speckled with red, or fuscous (on extremely pale specimens there may not be any markings but, in this case, the clavus never is infuscated or clouded with brown).

I also have examined the holotype female (BM) of *hospitus* collected from Chilpancingo, Guerrero, Mexico. Unfortunately, the specimen is a light-colored female, making comparison of male genitalia impossible. The BM specimen has entirely pale 2nd antennal segments, and the scutellum is pale with fuscous or brownish clouds along the inner margin of the clavus, indicating that it is conspecific with or very close to *fasciatus*. Carvalho and Fontes (1983) overlooked Kelton (1974) and Leston's (1979) synonymical treatment of *hospitus*. They illustrated male genitalia of what they considered is *hospitus* and recognized it as a valid species. In this paper, Carvalho and Fontes' (1983) interpretation is followed until their material can be restudied and compared to that of *fasciatus* to clarify the discrepancy.

To insure nomenclatural stability for the species *fasciatus* and *olivaceus*, I am designating the following lectotypes.

Dagbertus fasciatus.—Lectotype female: Label 1, "Carolin. mer."; 2, "Belfrage"; 3, "Typus" (red); 4, "*Lygus fasciatus* Reut. Typ." (folded); 5, "274 83" (pink); 6, "Riksmuseum Stockholm" (blue); 7, "Lectotype: ♀. *Lygus fasciatus* Reuter, by T. J. Henry" (red) [NRS]. Paralectotype: No other syntypes found.

Dagbertus olivaceus.—Lectotype male: Label 1, "Mandev'le, Ja., Apr. 06"; 2, "Van Duzee Collector"; 3, "8"; 4, "*Lygus olivaceus* n. sp., O. M. Reuter det."; 5, "Mus. Zool. H:fors, Spec. typ. No. 9924, *Lygus olivaceus* Reut."; 6, "Lectotype: ♂, *Lygus olivaceus* Reuter, by T. J. Henry" (UZMH). Paralectotypes: 4 males (1 CAS, 3 UZMH), 4 females (3 CAS, 1 UZMH), 1 [sex?], same data as for lectotype.

Dagbertus semipictus (Blatchley), **New Combination**

Bolteria semipicta Blatchley, 1926:743; Knight, 1928a:131; Knight, 1971:94.
Dagbertus parafasciatus Maldonado, 1969:36; Leston, 1979:377 (as synonym of *fasciatus* [Reuter]); Carvalho and Fontes, 1983:170. **New Synonymy.**

Blatchley (1926) described *Bolteria semipicta* from a single male taken at porch light at Dunedin, Florida. Knight (1928a), in reviewing the genus *Bolteria*, commented that "The relatively narrow vertex which in width does not equal the length of the first antennal segment, strongly suggests that this species may not belong in the genus *Bolteria*." In a later revision of *Bolteria*, Knight (1971) re-stated his doubts about the generic placement of *semipicta* and provided a key to help separate the 14 species known in the genus.

Maldonado (1969) described *parafasciatus* from a large series of specimens collected in Puerto Rico. Leston (1979), without comment, considered *parafasciatus* a junior synonym of *fasciatus* (Reuter). Carvalho and Fontes (1983), apparently in overlooking Leston's synonymical treatment, considered *parafasciatus* a distinct species.

I have examined Blatchley's holotype of *semipicta* and find it clearly a member of the genus *Dagbertus* Distant. Additionally, I have studied the lectotype of *fasciatus* (see type designation of *fasciatus* in this paper) and the holotype (USNM) and several paratypes (USNM) of *parafasciatus*, and agree with Carvalho and Fontes (1983) that these two species are distinct. *Dagbertus parafasciatus*, however, is conspecific with *semipictus* and, thus, a junior synonym.

Dagbertus semipictus can be separated from *fasciatus* in the U. S. fauna in having the 2nd antennal segment slightly longer than the basal width of the pronotum (in *fasciatus* the 2nd antennal segment is shorter than the basal width of the pronotum), the apex of the tylus fuscous (tylus pale on *fasciatus*), the sides of the thorax and abdomen with a wide, fuscous stripe (*fasciatus* has, at most, red flecks), and the base of the pronotum with a wide, transverse, brown to fuscous band.

With the above synonymy, *semipictus* is now known to occur in Florida and Puerto Rico. I have collected large numbers of this species in Dade and Monroe counties, Florida on the flowers of *Hippocratea volubilis* L. (Hippocrateaceae) and at black light traps. Maldonado (1969) listed the majority of his specimens from the flowers of *Tecoma stans* (L.) Juss. (Bignoniaceae).

Dagbertus irroratus (Blatchley), **New Combination**

Lygus (Neolygus) irroratus Blatchley, 1926:775.

Lygus irroratus: Carvalho, 1959:122.

Lygocoris irroratus: Kelton, 1974:379.

Blatchley (1926) described *irroratus* from a single female collected at Royal Palm

Park, Florida. He placed it in the subgenus *Neolygus* because of the finely punctate pronotum. Kelton (1974), in preparation for his revision of the North American lygus bugs (Kelton, 1975), tentatively transferred *irroratus* from *Lygus* to *Lygocoris* based on the original description. He noted that he had not been able to locate the type and that it was possible that the species might even belong in the subfamily Orthotylinae or Phylinae.

I have been able to study the holotype of *irroratus* (PU) and find that it does not belong in either *Lygus* Hahn or *Lygocoris* Knight, and that it is clearly a member of the subfamily Mirinae. Unfortunately, the specimen is a female, so male genitalia cannot be studied, but based on the general body form, impunctate dorsum, head structure, peculiar emargination of the eyes, and position of the antennae, *irroratus* is nearest to species of *Dagbertus* Distant and *Taylorilygus* Leston. Slater and Baranowski (1978) separated *Dagbertus* from *Taylorilygus* by the relative length of the 3rd antennal segment to the length of the head. On the basis of this character, *irroratus*, with a very short 3rd antennal segment, should be placed in *Dagbertus*.

The overall pale brown coloration flecked with numerous scattered paler spots (spots less evident on clavus and corium) on the dorsum and ventral surface, the pale brown antennal segments with segment III very short, and the somewhat reddish tibiae with large white spots will distinguish *irroratus* from all other species now included in *Dagbertus* (see Carvalho and Fontes, 1983).

Europiella stitti Knight

Europiella stitti Knight, 1968:46.

Europiella franseriae Knight, 1969:84. **New Synonymy.**

Europiella stitti was described from Gila Bend, Arizona based on specimens collected by L. L. Stitt in Feb. 1941 (Knight, 1968). *Europiella franseriae* also was described from Gila Bend, Arizona (Knight, 1969) based on specimens collected by L. L. Stitt in Mar. 1941 on *Franseria deltoidea* Torr. (Asteraceae). In describing *franseriae*, Knight noted that it would key out with *E. humeralis* Van Duzee, but did not mention its similarity to *stitti* or that *humeralis* keyed to two different places.

I have compared the holotypes and paratypes (USNM) of *stitti* and *franseriae* and find them clearly conspecific. It is possible that Knight forgot his earlier description of *stitti* or that his key, based in several places on the position of the rostrum (extending to posterior coxae vs. posterior trochanters), will fail to work if the specimens have the head dried in a slightly different position.

Lindbergocapsus Wagner

Lindbergocapsus Wagner, 1960:112. Type-species: *Lindbergocapsus lenaensis* Wagner, 1960 (original designation) [a junior objective synonym of *Orthotylus lenensis* Lindberg, 1928 (synonymized by Wagner, 1962)].

Labopidicola Kelton, 1979:757; Henry, 1982:1. Type-species: *Labopidea idahoensis* Knight, 1968 (original designation). **New Synonymy.**

The North American genus *Labopidicola* was described to accommodate a group of onion-feeding species that were previously placed in the genus *Labopidea* Uhler

(Kelton, 1979). Kelton (1979) gave characters to separate this group from *Labopidea*, and I (Henry, 1982) redescribed the known species, described *cepula* as new from Texas, and provided an identification key to separate the six North American species.

Recently, Dr. I. M. Kerzhner suggested to me (in lit.) that the nearctic genus *Labopidicola* was congeneric with the Asian genus *Lindbergocapsus*. After an exchange of specimens and comparison of the type-species of each genus, I agreed that *Labopidicola* is a junior synonym of *Lindbergocapsus*. Although Kelton (1979) and I (Henry, 1982) considered *Labopidicola* deserving of generic rank, at least, Kerzhner (1964 [1967]) placed *Lindbergocapsus* as a subgenus of *Orthotylus*, and Vinokurov (1979) treated *Lindbergocapsus* as a junior synonym of *Labopidea* and reduced that genus to a subgenus, also in *Orthotylus*. At present, however, I believe *Lindbergocapsus* should be maintained as a genus until a more comprehensive review of the tribe Orthotylini can be made.

Lindbergocapsus runs to *Labopidea* in Knight's (1941, 1968) generic keys, but can be distinguished from U. S. species of *Labopidea* by the more distinct basal carina on the vertex, the tylus or clypeus clearly visible from the dorsal aspect, the shorter, stouter rostrum, and the lack of fuscous markings on the head, calli, and antennae (Henry, 1982). Kelton (1980) provided a key to separate *Lindbergocapsus* [as *Labopidicola* from other genera occurring in the Canadian Prairie Provinces.

As a result of the above generic synonymy, the following six species are transferred to the genus *Lindbergocapsus*: *ainsliei* (Knight), 1928; *alii* (Knight), 1923a; *cepulus* (Henry), 1982; *geminatus* (Johnston), 1930; *idahoensis* (Knight), 1968; *planifrons* (Knight), 1928.

Lopidea confraterna (Gibson)

Hadronema confraterna Gibson, 1918:83.

Lopidea lepidii Knight, 1918:175. **New Synonymy.**

Lopidea occidentalis Van Duzee, 1918:296 (synonymized by Carvalho, 1958:86).

Lopidea confraterna: Carvalho, 1958:84.

Lopidea confraterna was described in the genus *Hadronema* Uhler from a single male taken on *Bigelovia* sp. (Rubiaceae) at Las Cruces, New Mexico. Carvalho's (1958) transfer of this orthotyline to *Lopidea* Uhler is the only other treatment.

Lopidea lepidii was described from numerous specimens collected on *Lepidium thurberi* Wooten (Brassicaceae) in Arizona and Colorado. Knight (1918) figured the male parameres of this species.

Lopidea occidentalis was described from 39 specimens collected on *Croton californicus* Muell. (Euphorbiaceae) at Palm Springs, California. Carvalho (1958) placed it as a synonym of *lepidii*.

I have examined paratypes of *lepidii* (USNM) and a single male paratype of *occidentalis* (USNM) and agree with Carvalho that *occidentalis* is a junior synonym of *lepidii*. In addition, I have studied the holotype of *confraterna* (USNM) and find that it is also conspecific with *lepidii*. All three species were described in 1918 by different authors, but Gibson's publication appeared before the others. Smithsonian Library copies received as follows: Gibson, Mar. 26, 1918; Knight, May 3, 1918. Van Duzee's paper appeared in the Oct. issue of the *Proceedings of the California Academy of Sciences*.

Lopidea hesperus (Kirkaldy)

Capsus coccineus Walker, 1873:93 (preoccupied by *Capsus coccineus* Meyer, 1843).

Lomatopleura hesperus Kirkaldy, 1902:252 (new name for *coccineus* Walker).

Lomatopleura coccineus: Distant, 1904:109.

Lopidea reuteri Knight, 1918:459. **New Synonymy.**

Lopidea hesperia: Blatchley, 1926:837.

Lopidea hesperus: Carvalho, 1958:85.

Walker (1873) described *Capsus coccineus* apparently from a male collected at St. John's Bluff, Florida. Kirkaldy (1902) recognized that Walker's name was preoccupied by *coccineus* Meyer and renamed the species *hesperus*. Blatchley (1926) included *hesperus* in his treatment of *Lopidea* but gave only the original description. He noted that because the original description lacked definitive diagnostic statements he could not include the species in his key.

Knight (1918) described *reuteri* from Missouri (holotype), Connecticut, Massachusetts, New Jersey, New York, Pennsylvania, and Virginia; figured male genitalia; and gave *Hamamelis virginiana* L. (Hamamelidaceae) as the host. He redescribed and keyed this species in his Miridae of Connecticut (1923b) and the Miridae of Illinois (1941). Blatchley (1926) also redescribed and keyed this species. *Lopidea reuteri* also is known from Illinois, Michigan, Mississippi, and West Virginia (Knight, 1941) and Georgia (Henry and Smith, 1979).

Knight (1965), after receiving a sketch of the male parameres and tergal process of the type of *coccineus* from W. E. China (BM), revised his earlier interpretation (Knight, 1962), and concluded that the species was very similar to *reuteri*. He noted that the slight differences shown in his drawings of the tergal process were sufficient to distinguish *hesperus* from *reuteri*. Independently, I have examined the type of *coccineus* Walker (BM) and believe that it should be considered the senior synonym of *reuteri*. I have studied the shape of the tergal process of *reuteri* on specimens from Georgia, Pennsylvania, and Wisconsin and consider the slight differences in the tergal process as noted by Knight (1965), to represent infraspecific variation. The thickness of this bladelike structure also appears slender to slightly more broadened, depending on the position in which the specimen is viewed.

Although Walker apparently had only a single specimen when describing *coccineus*, he did not specify a number. To eliminate any doubt, the following male in the BM is designated the lectotype of *coccineus* Walker: Label 1, "Type" (circular white label with green margin); 2 (folded), "152. *Capsus coccineus*"; 3, "E. Doubleday, St. John's Bluff, E. Florida"; 4, "Lectotype: *Capsus coccineus* Walker, by T. J. Henry."

Lopidea knighti Henry, **New Name**

Lopidea occidentalis Knight and Schaffner, 1975:418 (preoccupied by *Lopidea occidentalis* Van Duzee, 1918:296, a junior synonym of *Lopidea confraternata* (Gibson)—see new synonymy in this paper).

Lopidea occidentalis was described from 11 specimens collected in Baja California, Mexico. Because the name *L. occidentalis* is preoccupied, I am proposing the re-

placement name *knighti*, in honor of the late H. H. Knight for his extensive work on the genus *Lopidea*.

Lopidea media (Say)

Capsus medius Say, 1832:22 (LeConte ed., 1859:341).

Lopidea media: Uhler, 1872:412.

Capsus floridanus Walker, 1873:97 (synonymized by Knight, 1962:37).

Lopidea floridana: Distant, 1904:108.

I mention this species only because Knight (1962) did not have the type of *Capsus floridanus* Walker for study, only a few descriptive notes and a watercolor illustration of the female type of *floridanus* provided by W. E. China (BM). Recently, I re-examined the type of *floridanus* (BM) and found that Knight's synonymy is entirely correct.

Paramixia polita (Uhler), **New Combination**

Psallus politus Uhler, 1894:195.

Sthenarus plebejus Reuter, 1907:26; Van Duzee, 1907:28; Knight, 1926:256; Blatchley, 1926:922. **New Synonymy.**

Orthotylellus carmelitana: Maldonado, 1969:65 (misidentification).

Paramixia carmelitana: Henry and Wheeler, 1982:236 (misidentification).

Uhler (1894) described *Psallus politus* from 19 specimens collected at Chantilly, Mirabeau, and Mount Gay Estates on Grenada.

Sthenarus plebejus was described from several specimens taken at Mandeville, Jamaica and a single specimen taken at Tambilo, Jamaica. Later, Van Duzee (1907) reported *plebejus* from Balaclava, Jamaica, and Knight (1926) recorded it from Florida. Blatchley (1926) also recorded *plebejus* from Florida and added Cuba (based on specimens identified by Knight).

Recently, Henry and Wheeler (1982) reported Carvalho's (1948) *Paramixia carmelitana* new in the United States based on Florida specimens. They also noted that Maldonado (1969) recorded the same species from Puerto Rico.

Since the 1982 report (Henry and Wheeler), I have had the opportunity to study specimens at the BM and CAS and have discovered that *Psallus politus* and *Sthenarus plebejus* are conspecific and belong in the genus *Paramixia*. In addition, I have re-evaluated the specimens I originally identified from Florida (USNM) and specimens Maldonado identified from Puerto Rico (USNM) as *carmelitana*. By comparing syntypes of *politus* (BM, USNM) and *plebejus* (CAS) with paratypes of *carmelitana* (USNM), I find that it is *politus* that should be recognized from Puerto Rico and the United States, not *carmelitana*.

Preliminary examination indicates that *Paramixia polita* can be separated from *carmelitana* by the smaller size (males and females range from 2.04–2.20 mm) and the proportionately shorter 2nd antennal segment that is equal to or shorter than the width of the head across the eyes. USNM specimens of *carmelitana* measure 2.48–2.80 mm long, and the 2nd antennal segment is longer than the dorsal width of the

head. Also the aedeagus appears shorter and slightly more stout in *politus* than in *carmelitana*.

Although only two species of the pilophorine genus *Paramixia* are recognized from the Western Hemisphere, the large number of undetermined specimens in the USNM collection from other islands of the Caribbean and Central and South America indicates that the genus is much larger and in need of revision.

Psallus politus.—Lectotype male, present designation, Label 1, "102"; 2, "Mount Gay Est. (Leeward side), Grenada, W. I., H. H. Smith"; 3, "Lectotype: ♂, *Psallus politus* Uhler, by T. J. Henry" (USNM type No. 100941) [Note: the lectotype is selected from USNM material because of the poor condition of the BM specimens]. Paralectotypes: 1 male, same data as for lectotype (USNM); 1 male, Chantilly Est. (Leeward side), Grenada, W. I., H. H. Smith (USNM); 2 males (1 BM, 1 USNM), 4 females (3 BM, 1 USNM), Mirabeau Est. (Windward side), Grenada, W. I., H. H. Smith.

Sthenarus plebejus.—Lectotype male, present designation, (top specimen of two on a single pin): Label 1, "Mandev'le, Ja., Apr. 06"; 2, "Van Duzee Collector"; 3, "Paratype"; 4, "EP Van Duzee Collection"; 5, "Lectotype: ♂, *Sthenarus plebejus* Reuter, by T. J. Henry" (CAS). Paralectotype: 1 female on same pin (CAS).

Phytocoris pleuroimos Henry, **New Name**

Phytocoris intermedius Henry, 1979:6; Henry and Stonedahl, 1983:450 (preoccupied by *Phytocoris intermedius* Reuter, 1877).

I described *Phytocoris intermedius* from material collected in Georgia and North Carolina (Henry, 1979). Dr. I. M. Kerzhner (ZIL), has informed me that this name is a primary junior homonym of the palearctic *Phytocoris intermedius* Reuter, 1877, which is a junior synonym of *Phytocoris populi* (Linnaeus), 1758.

I propose the replacement name *pleuroimos*, taken from the Greek roots "pleura" meaning side and "oimos" meaning stripe. This epithet denotes the pale stripe on the propleura of this species.

Pseudoxenetus regalis (Uhler)

Xenetus regalis Uhler, 1890:80.

Xenetus scutellatus Uhler, 1890:81. **New Synonymy.**

Stenidea scutellata: Townsend, 1891:54.

Stenidea regalis: Townsend, 1891:54.

Pseudoxenetus regalis: Reuter, 1909:67; Carvalho, 1958:150; Akingbohunge et al., 1972:12; Henry and Smith, 1979:215; Wheeler et al., 1983:142.

Pseudoxenetus scutellatus: Reuter, 1909:67; Carvalho, 1958:158; Akingbohunge et al., 1972:12; Henry and Smith, 1979:215; Wheeler et al., 1983:142; McPherson et al., 1983:37.

Uhler (1890) described *regalis* and *scutellatus* in Distant's mirine genus *Xenetus*. Reuter (1909) recognized that the Uhler species were not congeneric with *lanuginosus* Distant, the type-species of *Xenetus*, and erected *Pseudoxenetus* to accommodate them. Van Duzee (1916) recognized *regalis* as the type of *Pseudoxenetus*.

Carvalho (1958) recorded *regalis* from New York to Michigan, south to Texas and Florida, whereas *scutellatus* is listed from Massachusetts to Minnesota, and south only to Missouri and North Carolina. More recently Akingbohunge et al. (1972) reported *regalis* from Wisconsin, and Henry and Smith (1979) recorded *scutellatus* from Georgia.

There is an obvious gradation from north to south, with the dark-color form *scutellatus* more common in the north and *regalis* with the orange pronotum more common in the south. Blatchley (1926) is the only worker to suggest that *scutellatus* might be a color form of *regalis*.

I have studied a series of both color forms taken in North Carolina, near Charlotte (by A. G. Wheeler, Jr., PDA), that were collected as nymphs (and reared) and adults on the same trees and dates. My initial examination revealed only the striking orange-color difference of the pronotum in *regalis*, the only character used to separate the two forms in several keys (Blatchley, 1926; Knight, 1941; Froeschner, 1949).

In addition, I found by taking 4 males and 4 females from the North Carolina series that measurements of the various body structures (head, rostrum, antennae, and pronotum), do not vary by more than 0.10 mm and often overlap. Male genitalia were examined and they, likewise, show virtually no variation between the two forms. In fact, the male parameres are nearly identical. This is particularly significant in the tribe Orthotylini where male genital structures are especially distinct for many species. Kelton (1959) illustrated the parameres and aedeagus of the dark-color form *scutellatus*.

Even though *regalis* and *scutellatus* appear morphologically inseparable, Uhler's (1890) original descriptions of the two are written quite differently, giving the impression to a casual reader that, as species, they are distinct in general body form and pubescence. After close examination, however, it is clear that both will fit either description with only a mere modification of the pronotal coloration.

Further, simple red-black color dimorphism is documented for other taxa. Carvalho and Schaffner (1975) treated a similar case when they considered *Barberiella apicalis* Knight (known from the northern U.S.) a junior synonym of *B. formicoides* Poppius (known from Texas). They showed that other than the reddish-brown color of *formicoides* and the black color of *apicalis*, the two mirids showed "no consistent differences in the external characters or morphology of the genitalia." Naito (1983) found that the rose sawfly, *Arge nigrinodosa* (Motschulsky), exhibits a red-black dimorphism on the mesepisternum of the thorax. Populations in northern Japan have the mesepisternum black, while several more-southern populations have this structure red. He showed that the color dimorphism in *nigrinodosa* was "... controlled by a simple Mendelian system—a simple-locus two-allele system—where the red allele is dominant over the black one," and proposed "that the red allele was derived from the black as a dominant mutant."

For the reasons discussed above, I consider *regalis* and *scutellatus* conspecific color forms. Because *regalis* has been designated as the type of the genus (and has page priority), it is the name that should be used for the species.

For nomenclatural stability the following lectotypes in the USNM are designated for *regalis* and *scutellatus*.

Pseudoxenetus regalis.—Female lectotype: Label 1, "Tex."; 2, "*Stenidea regalis*

Uhler" (handwritten); 3, "Type No. 1138, U.S.N.M."; 4 (here added), "Lectotype: ♀, *Xenetus regalis* Uhler, by T. J. Henry" (USNM type No. above retained). This specimen, having Uhler's handwritten identification label, appears to be one of the specimens he mentioned from Texas and is considered part of the original syntype series.

Pseudoxenus scutellatus.—Female lectotype: Label 1, "N. Ill."; 2, "28"; 3, "Straumbg." (handwritten); 4, "P. R. Uhler Collection"; 5, "Lectotype: ♀, *Xenetus scutellatus* Uhler, by T. J. Henry (USNM No. 100945)." This specimen is selected as the lectotype instead of a specimen found in the USNM type collection (with type No. 1137) from "C. Mo." Uhler stated that *scutellatus* was common in Illinois but did not mention Missouri in his original description; therefore, the Missouri specimen cannot be considered part of the original syntype series.

Ranzovius clavicornis (Knight)

Psallus clavicornis Knight, 1927a:13; Blatchley, 1928:20.

Excentricus mexicanus: Blatchley, 1926:962 (in part); Blatchley, 1928:17.

Ranzovius contubernalis Henry, 1984:61; Wheeler and McCaffrey, 1984:68. **New Synonymy.**

Ranzovius (= *Exocentricus* [sic]) *clavicornis*: Mead, 1984:2.

Knight (1927a) described *clavicornis* based on a specimen collected at Drury, Maryland (near the Patuxent River) taken on *Pinus virginiana* Mill. (Pinaceae), and two at Washington, D.C., found feeding on mealybugs. Other than Blatchley's (1928) listing, no other mention of this species has appeared in the literature.

Recently, in a revision of the spider-web inhabiting bugs of the genus *Ranzovius* (Henry, 1984), I described the species *contubernalis*, based on a large number of specimens from Connecticut, District of Columbia, Florida, Maryland, North Carolina, and Virginia. Wheeler and McCaffrey (1984) presented an interesting companion study on the life history and behavior of *contubernalis* and described the fifth-instar nymph.

While preparing for the revision of *Ranzovius*, I discovered that a specimen in the USNM labeled as the holotype of "Psallus varicornis Knight" was conspecific with the species I was describing as *contubernalis*. Eventually, however, I was able to confirm that the epithet "varicornis" was only a manuscript name. This prompted me to include the specimen as a paratype of *contubernalis*.

After my revision of *Ranzovius*, I came across the description of the species *Psallus clavicornis*, described from Drury, Maryland. Not being familiar with this species, I consulted the USNM type collection to examine the holotype. In place of the holotype was a note reading "Not located, Apr. 82" (by R. C. Froeschner, USNM). After studying the original description of *clavicornis* and comparing the label data of the Drury specimen, I was able to piece together that the holotype of *clavicornis* was mislabeled by Knight as "varicornis." Further search of the Knight collection (USNM) revealed the two other specimens Knight (1927a) chose as paratypes for *clavicornis*, but as with the holotype, they were labeled as "varicornis." Apparently in preparing for publication, Knight decided on a different name for his species, but never relabeled his types. It is now clear that *Ranzovius contubernalis* is a junior synonym of *Psallus clavicornis*.

The combination *R.* (= *Excentricus*) *clavicornis* was published ahead of the above explanation (Mead, 1984) based on an identification by me of a single specimen collected in Florida. It should be noted that *Excentricus*, listed as a synonym in that report, is a valid generic name and is not congeneric with *Ranzovius*, although it has been used in combination with several species of the genus (see Henry, 1984).

Saileria compsus (Reuter), **New Combination**¹

Orthotylus compsus Reuter, 1907:14; Van Duzee, 1907:29; Knight, 1927b:181.

Orthotylus compsus was described from a single specimen taken at Kingston, Jamaica (Reuter, 1907); Van Duzee (1907) gave this same record in his list of the Hemiptera taken on Jamaica. The only other record for this species was given by Knight (1927b) from Helotes, Bexar Co., Texas.

I have studied the holotype of *compsus* (CAS), the three specimens collected by Knight (USNM), and two additional males (USNM) taken by N. L. N. Krauss on *Lantana camara* L. (Verbenaceae) at Kingston, Jamaica in December 1955; and find that this orthotyline belongs in the genus *Saileria* Hsiao. Although the Knight specimens are females, the shorter second antennal segment of one specimen (antennae missing on other specimens) suggests that they are correctly associated with the species *compsus*.

Species of the genus *Saileria* are very similar in having a pale translucent dorsum sprinkled with green blotches or spots. *Saileria compsus* appears closest to *S. irrorata* Henry in color pattern and male genitalia. This species will run to couplet 3 in my key (Henry, 1976) with *bella* Van Duzee and *irrorata*. It can be separated from *bella* by the small round spots on the dorsum, compared to the large quadrate blotches on *bella*. From *irrorata* it is distinguished by the shorter second antennal segment that is about $\frac{3}{4}$ the length of that in *irrorata* (*compsus*: 0.72 mm for males, 0.70–0.74 mm for females; *irrorata*: 0.94–1.00 mm for males, 0.92–0.98 mm for females). Also, the primary spiculum of the male aedeagus is hooked with the apical area serrate, compared to the broadly rounded and smooth apex of this structure on *irrorata* (figured by Henry, 1980).

Taylorilygus pallidulus (Blanchard)

Phytocoris pallidulus Blanchard, 1852:183.

Lygus apicalis Fieber, 1861:275 (synonymized by Carvalho, 1959:265).

Lygus olivaceus var. *viridiusculus* Knight, 1917:600. **New Synonymy.**

Lygus pallidulus: Carvalho, 1952:185.

Lygus fasciatus var. *viridiusculus*: Blatchley, 1926:762 (*lapsus*; incorrect species-subspecies association).

Dagbertus olivaceus var. *viridiusculus*: Kelton, 1955:284.

Taylorilygus pallidulus: Carvalho, 1959:265.

Taylorilygus pallidulus is a common, wide-ranging, weed-feeding species known from many parts of the world, including Africa, Asia, Europe, South America, and

¹ While this paper was in press I discovered that Carvalho (1976, Rev. Brasil. Biol., 36:57) previously recognized that *compsus* belonged to the genus *Saileria*.

North America (Carvalho, 1959). Snodgrass et al. (1984) provided an extensive list of host plants collected in Arkansas, Louisiana, and Mississippi. In many areas of the southern United States, *Conyza* [*Erigeron*] *canadensis* (L.) Cronq. (Asteraceae) is the favored host. For many years, this species went under the name of a junior synonym, *Lygus apicalis* Fieber. Kelton (1955) raised Leston's (1952) subgenus *Taylorilygus* to accommodate the *apicalis-simonyi* group of *Lygus* species. Carvalho (1959), who studied the type of *pallidulus*, recognized it as the senior synonym of *apicalis*. *Taylorilygus pallidulus* can be identified (as *Lygus apicalis*) using keys provided by Blatchley (1926) and Knight (1941).

Knight (1917) described *Lygus olivaceus* var. *viridiusculus* from Tisbury, Massachusetts based on two females. This variety has been discussed by Blatchley (1926), who considered it and the species *Lygus olivaceus* Reuter synonyms of *Lygus fasciatus* Reuter. Kelton (1955) correctly transferred *fasciatus* and *olivaceus* to the genus *Dagbertus* Distant but did not specifically mention *viridiusculus*. Leston (1979) clarified the status of the U.S. species of *Dagbertus* but was unable to place Knight's variety *viridiusculus*.

I have examined Knight's holotype (CU) and the paratype female (CAS) from Tisbury (dated 5-VIII) and find that both specimens are examples of *Taylorilygus pallidulus*, not a variety of either *fasciatus* or *olivaceus*.

In addition to the two type specimens, I have examined three males (CAS) determined by Knight, two as *Lygus olivaceus* and one as *Lygus fasciatus viridiusculus*. All three (2 from Tisbury, dated 25-VII and 6-VIII, and 1 from Manomet, MA, dated 8-VIII-1912) are *fasciatus*. The one specimen labeled as *L. fasciatus viridiusculus* probably indicates a *lapsus* on Knight's part, since he never published that combination, and also may have helped to develop Blatchley's (1926) concept of the subspecies. The study of these specimens indicates that Knight incorrectly recognized the species *fasciatus* and *olivaceus* (see discussion of *Dagbertus fasciatus* and *olivaceus*).

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